PEO C3S Knowledge Center Now Online

New Web Site Combines Technological Wizardry with Meaningful Content

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he challenges inherent in managing an organization of nearly 1,600 government and contractor personnel are significant. Just as the challenges in commanding an Army unit revolve around the timely availability and application of information, so also the ability to harness and direct the development of major acquisition programs largely relies on the efficient management and use of knowledge.

The declining resources (personnel, time, and money) available to task managers, the diffusion of the workforce, and the necessity that the PEO's workforce stay abreast of the dizzying pace of technological evolution have a great impact on the need for collaboration and the use of knowledge management.

Keeping Pace with Technology Evolution

These factors caused the PEO C3S at Fort Monmouth, N.J., to undertake the creation of the PEO C3S Knowledge Center. As one of the three original pilot programs under the Army Chief of Staff's Knowledge Online program, the PEO formed a team with the mission to formulate and implement an Integrated Data Environment (IDE) that uses technology to leverage shared knowledge and improve work and communication efficiencies. This article focuses on the

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Web-based Knowledge Center portion of this effort, which also included multimedia conference rooms, desktop technologies, secure e-mail system, and policies for implementation.

In bringing the geographically dispersed organization together and integrating data and business processes, the PEO

C3S Knowledge Center was designed to assemble sensitive but unclassified information that addressed the key questions shown in the chart (opposite page) and provide users with a portal to other associated sites. In doing so, it fills a niche between the Web pages that provide information to the general public (the Army Home Page), and the re-

stricted locations (through Secure Internet Protocol Router Network connectivity) that contain classified infor-

Knowledge Center

The two-year Knowledge Center effort focused on the development of an enterprise system that meets current needs and has the ability to keep pace with future requirements. The Knowledge Center configuration has over 600 applica-



tions and databases that have been assembled into a single information resource. At a macro level, the center provides the community with assistance and information in six areas:

Institutional Awareness

Institutional Awareness provides members with real time information on what is transpiring within their community. Daily broadcasts of Army and PEO C3S news, project updates, access to calendar events, meetings, human resources announcements, and instant messaging/chat are but a few of the features available to users. Additionally, this feature provides users with portals to other major Department of Defense and Army Web sites.

Information Exchange

Information Exchange applications bring together information that historically resided in subordinate offices and was rarely shared throughout the community. Various libraries serve as depositories of key information (such as briefings, policy, technical papers, and system information) from each project office, and enable the site user to answer questions dealing with requirements, policies, documents under review, comments submitted thereto, briefings, and points of contact.

Collaborations/Real Time Communications

Collaborations/Real Time Communications enable Knowledge Center users to share information and conduct "virtual" meetings and support group collaboration among widely dispersed team members. Shared applications, white boarding, and other online tools provide users with suites of technology tools to enhance performance. Virtual meetings between PEO C3S members based at Fort Monmouth and other CONUS sites, as well as supporting U.S. forces deployed in Bosnia and Kosovo, are routine. The provision of "24/7" global access to information and planning tools are particularly vital to that portion of the PEO C3S community that frequently travels (our "road warriors") to meet Army users, support Army and joint exercises, support system reviews and fieldings, and conduct decision briefings in Washington. This new channel for decision making, group interaction, and systems support has both contributed to team performance and significantly reduced travel and communications costs.

Knowledge Management

Knowledge Management applications provide users assistance on managing and controlling the entire acquisition development process - from drafting a requirements package through source selection and milestone decisions. Databases provide access to a library of "lessons learned," identify subject matter experts, and define functional knowledge areas/information requirements.

Workflow

Workflow applications support the use of automated business processes such as suspense actions, warranty tracking, contract data delivery, and acceptance processes. The automated scheduling system and distributed workload features of the site support the automation of redundant processes, the reduction in the processing time for actions, and the analysis of time and productivity measures in the work process. Improved archiving and configuration management and the ability to better understand and focus on inefficient or broken business processes are but two of the benefits derived from these features.

Project Management/Team Tools

Project Management/Team Tools assemble specific tools that have the sin-

PEO CS3 Knowledge Center

What a HQs Staff **Needs to Know**

What is the requirement? What is the priority? What is the status?

Who are the proponents? Who are the stakeholders? Who controls the processes?

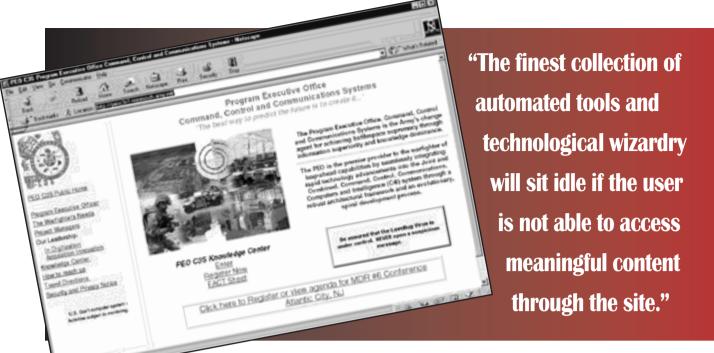
What are the laws, regulations and policies? What are the time and resource constraints?

equirements influencing Design nformation to Address Staff Requirements

Automated Tools to Support HQs Staff

Program planning and scheduling Budgeting Spiral Development **Briefing Archives** Configuration Management and Control

Interoperability Standards and Issues Tracking and logistic strategies Follow on releases



gular objective of assisting an Integrated Product Team or a Project/Product Manager in functioning across geographical boundaries and focusing on critical issues. Tools support the performance of action tracking, risk assessments, and scheduling actions. Team rooms provide mechanisms for the sharing of documents and calendars. The maintenance of master schedules and interoperability databases allow for the rapid dissemination and configuration management of this key information and the means to "audit trail" key documents and decisions

On the Right Track

While the development of the Knowledge Center continues, sufficient feedback and experience now exist to conclude that the effort is "on the right track":

- Registration has soared, and there are now over 6.800 users.
- Between October 1998 and August 2000, the number of monthly hits increased from 16,500 to nearly 720,000 (and continues to grow at a rate of 15 percent every month); the number of documents available through the site increased from 300 (October 1998) to over 12,000 (August 2000).
- User feedback shows that nearly 75 percent of the users believe that use

- of the Knowledge Center increases productivity.
- A recent Return on Investment study concluded that the \$2.5 million investment has generated a \$23.5 million cost savings.

Lessons Learned

The development of this capability has not been without its challenges, and the experience has generated the following lessons learned that stand to benefit other organizations that move in this direction:

- Active "championing" by senior management is critical to both the development of the Knowledge Center and the fostering of the business processes, that allow for the realization of the benefits inherent in the IDE. The senior manager must provide the resources to address the requirements and be a vocal activist in prodding other community members to support the efforts of the Knowledge Center Team.
- Resolving the conflict between security and open data exchange is a challenge with no "golden key" to solve all issues. The Knowledge Center's development has occurred within the context of daily considerations of the seeming paradox between the need for data security and the premise that the free access and interchange of information, using digital technologies, is a positive contributor to work effectiveness in the

- contemporary environment. The constant balancing of these concepts demands the constant balancing of security policies, technology, and human factor considerations.
- Increased partnerships and linkages with external agencies are major contributors to the value of the Knowledge Center and the enterprise system users. The PEO C3S Knowledge Center presently has partnerships with the U.S. Army Communications and Electronics Command (CECOM); Research and Engineering Center; Program Executive Officer for Intelligence. Electronic Warfare and Surveillance (PEO IEW&S); the U.S. Army Materiel Command/CECOM Acquisition Center; and the Army Knowledge Online office. Because of these partnerships, the site increases the breadth and depth of information available within the password-protected Intranet, and mutually leverages investments in databases, applications, and technologies. Partnerships are an ideal way to buy increased functionality and utility at discount prices.
- The community must be responsible for providing the quality, quantity, and currency of the Knowledge Center's content, and supporting senior executives in pushing users to use the information and tools resident at the Center. The utility of this knowledge management initiative and its ability to contribute to increasing the effective-

ness and efficiency of the workforce is directly tied to the quality of the site. The finest collection of automated tools and technological wizardry will sit idle if the user is not able to access meaningful content through the site.

• Changing the culture of the using community may be the most challenging hurdle in the full implementation of the technical capability. The old adage that "knowledge is power" has often materialized in the drive to "privatize" information within the individual, section, or office. The use of Web applications to improve business processes is, conversely, built upon the premise that the sharing of information and experiences on achieving success and avoiding failure is the most effective means of improving organizational performance.

Some types of information such as financial status and existing technical challenges, have long been viewed as sensitive, and shared only with the trusted few who had a "need to know." Convincing organizational subscribers to provide this and other types of in-

formation seems to be a challenging task that will be accomplished only with time and the active involvement of senior leadership. Those looking for "quick fixes" through the use of Knowledge Center-type applications will be disappointed; those recognizing that the process of adopting and applying the human and organizational element is every bit as time-consuming as developing the technical approaches, will be rewarded for their diligence and patience.

· Secure e-mail must be integrated into the Web application. DoD's standards have established milestones for the encryption of all e-mail traffic and the use of Public Key Infrastructure (PKI) to secure and authenticate the exchange of information. Concurrent with the rollout of the Knowledge Center, the PEO implemented a secure email system that meets DoD requirements. The Knowledge Center applications were integrated with e-mail capabilities so that all documents, even if received in the clear, are posted in a secure environment, and all subsequent transmissions are encrypted.

Final Thoughts

Development and improvement of the Knowledge Center capabilities proceed. Within the PEO C3S, the focus has moved from infrastructure (people and equipment) to leveraging these investments in the continual refinement of our business practices, processes, and the continual education of the workforce on how the Knowledge Center can be better used to do their jobs. Externally, the PEO CS3 Knowledge Center team is sharing its insights, technical acumen, and experience in an initiative and partnership to provide a similar capability to the communities within CECOM. The team is also available to discuss this program in greater detail and share information and insights with other communities that may be embarking on similar initiatives.

Editor's Note: For more information on the PEO CS3 Knowledge Center, go to http://peoc3s1.monmouth.army.mil/. For questions or comments on this article, contact Keslar at ekeslar@c3smail. monmouth.armv.mil.

D efense R esources M anagement **I** nstitute

Defense Resources Management Course

Course Objectives

Develop an understanding of resource management concepts, principles, and techniques

Who Should Attend?

Managers working in all fields concerned with resource allocation

Who is Eligible?

- · Military Officers (active or reserve) 0-4 and
- · Civilian DoD. GS-11 and above
- Equivalent ranking military & civilian officials of other nations



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